Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at http://about.jstor.org/participate-jstor/individuals/early-journal-content.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

Raphides in Trillium erectum, var. album—While making a microscopical examination of the parts of this *Trillium*, my attention was at once attracted by the large and well defined bundles of raphides to be found in the petals. Putting a portion of a petal between two glass sides and pressing them together until the specimen had been rendered nearly transparent, a power of 450 diameters revealed a beautiful display of these bundles. Sometimes three bundles were in the field at once and from no field were they absent. They were much larger than the cells of parenchyma among which they were lying, and in fact they did not seem to pay any attention to cell divisions but lay across them, covering sometimes as many as 4 cells. The bundles lay parallel with each other, pointing towards the base and apex of the petal in the line of most rapid growth. Some of them were very compact, the needles seeming to be firmly united together, while others were beginning to break up and discharge their crystals, caused no doubt by the pressure and consequent flow of sap. The needles were projected from the bundles at all angles, in some cases pushing each other along and thus gaining quite a distance from their starting point.

Having examined raphides in many plants I have found none so plain, none so easily obtained as these from the petals of *Trillium erectum*, var. *album*.—J. M. C.

Æstivation of Mahernia verticillata, L.—One of my pupils, Miss Anna Chace, of Valley Falls, R. I., called my attention to the peculiar æstivation of *Mahernia verticillata*, L., a familiar hot-house shrub of the Natural Order *Sterculiaceæ*. She noticed that of the convolution of the two flowers on a branch, the twisting of one was to the right, the other to the left. My own subsequent observations confirm hers. I have to add the following notes:

It will be remembered that the inflorescence is of the definite kind, one flower terminating the stem but pendant; the other axillary to a small foliaceous bract and raised on a longer peduncle than the really older flower. In point of fact, the two flowers have nearly coincident anthesis. In all cases that I have examined the æstivation differs in the two blossoms as Miss Chace observed, but sometimes it is the terminal, sometimes the axillary one that is dextrorse, the other always reversing the direction. Again I find that of a number of flowering branches examined, about an equal proportion fall under one or other of the above heads, *i. e.* sinistro-dextrorse or dextro sinistrorse. I coin terms to express my meaning. In all cases there is a distinct difference in the direction of convolution of any two blossoms of the same branch.—W. W. BAILEY.

P. S. I find, upon consulting LeMaout and DeCaisne under *Sterculiaceæ* two diagrams of *Hermannia* are given, the one "twisted to the right," the other to the left. It is not spoken of in the text.—W. W. B.

RECENT PUBLICATIONS.—*American Journal of Science and Arts*, May.—Dr. Leo Errera, in Belgium, has been investigating some Pentstemons and has come to the conclusion that the principal function of the sterile filament is to obstruct the access of unwelcome insects to the nectar at the base of the flower.

American Naturalist, May.—In regard to the self-fertilization of plants the conclusions of the Rev. Geo. Henslow are given as follows: "1. The majority of flowering plants can, and possibly do, fertilize themselves. 2. Very few plants are known to be physiologically self-sterile when the pollen of a flower is placed on the stigma of the same flower. 3. Several plants are known to be morphologically self-sterile in that the pollen cannot, without aid, reach the stigma, but is effective on that of the same flower. 4. Self-sterile plants from both the above causes can become self-fertile. 5. Highly self-fertile forms may arise under cultivation. 6. Special adaptations occur for self-fertilization."

Ferns of North America, Parts 14 and 15.—This number contains *Aspidium Goldianum*, Hooker, *A. Filix-mas*, Swartz, *Polypodium pectinatum*, L., *P. Phyllitidis*, L., *Pellæa Bridgesii*, Hooker, *P. Breweri*, Eaton, *Notholæna tenera*, Gillies, *Dicksonia pilosiuscula*, Willd., (*D. punctilobula*, Kunze.), *Cheilanthes tomentosa*, Link, and *C. Eatoni*, Baker.

Journal of Botany, British and Foreign.—On the Sources of the China Matting of Commerce. In addition to the matting used for sails, Canton and the large district city of Tung-kun are the seats of an extensive manufacture of floor-matting, almost all of which is exported to the United States. The plant from which it is woven is *Cyperus tegetiformis*, Roxb.

The third part of Prof. Beccari's *Malesia* describes five new species of *Osmoxylon* and nine of *Rhododendron*. Three species of *Nepenthes* are found in New Guinea. But the most interesting plant figured and described is *Corsia*, from the north coast of New Guinea; it is a small aphyllous parasite, with a scaly stem bearing a single terminal flower. It may form the type of a new Natural Order *Corsiaceæ*. Parts 80 and 81 of the *Flora Brasiliensis* were issued in December, 1878. In the proceedings of the Linnean Society of London, there